FIG.1

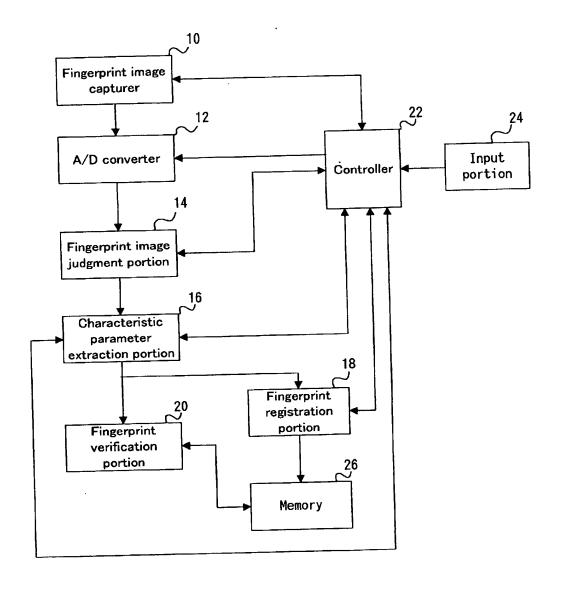


FIG. 2

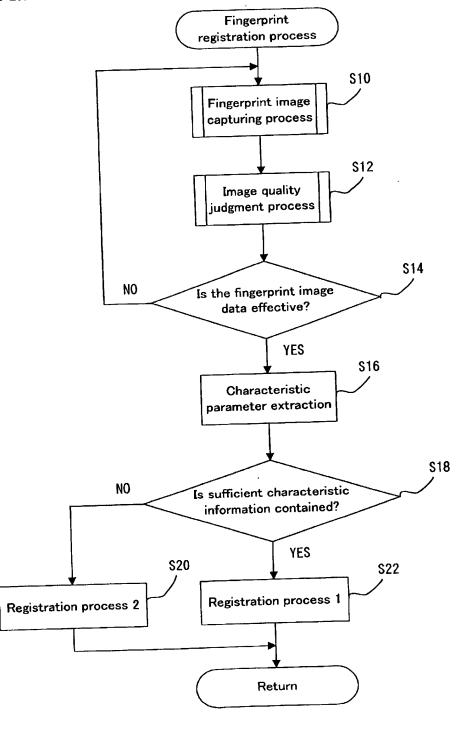
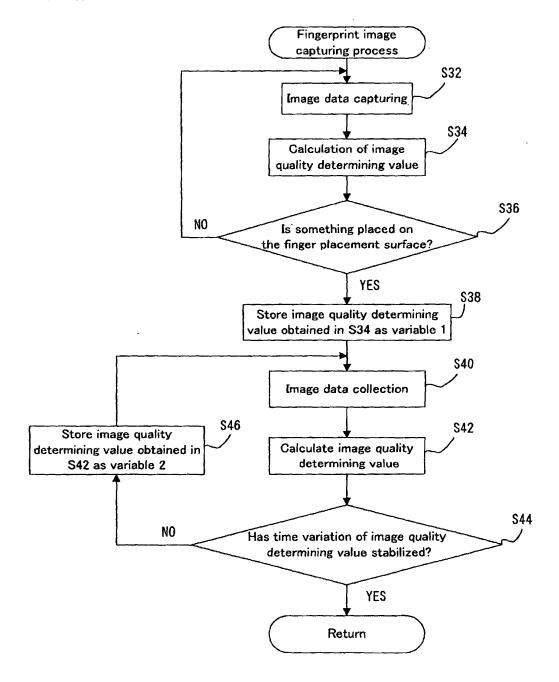
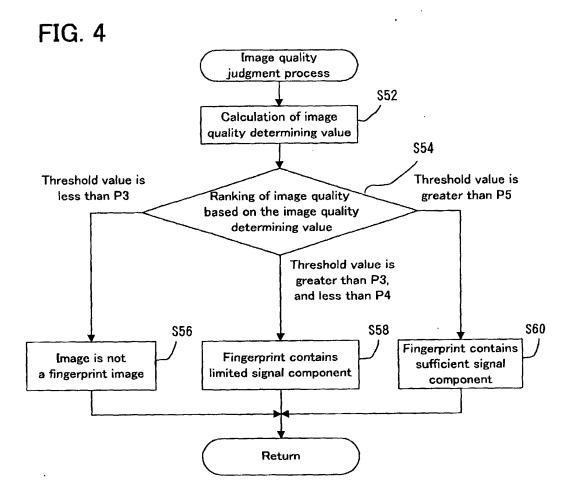


FIG. 3





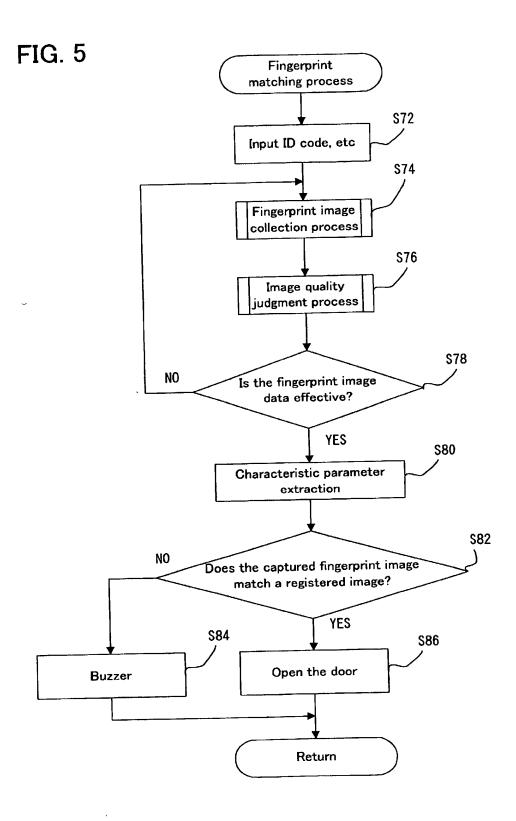


FIG. 6

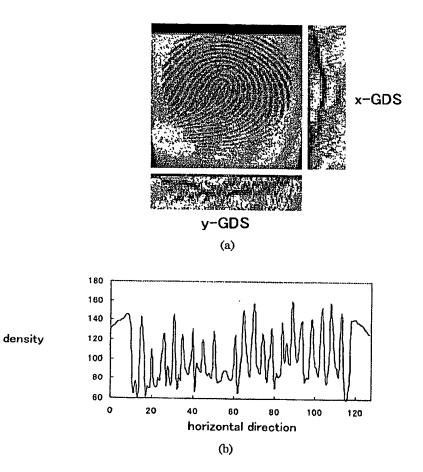


FIG. 7

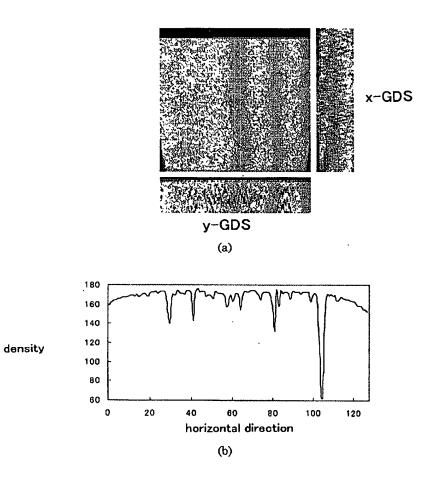


FIG. 8

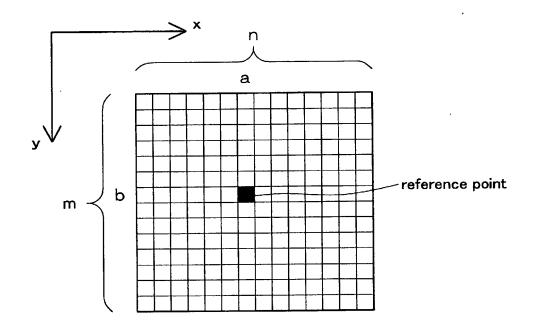


FIG. 9

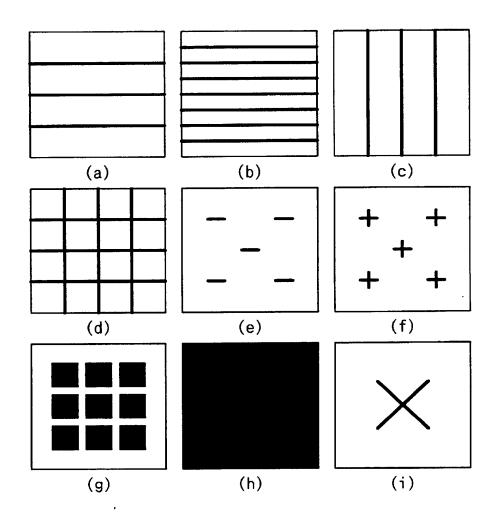


FIG.10

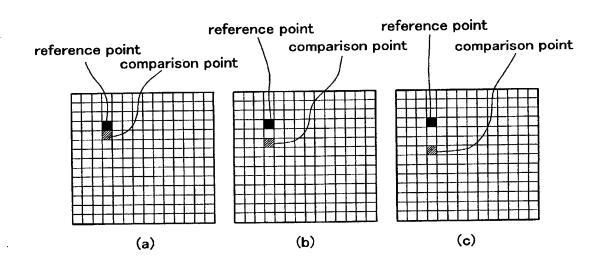


FIG.11

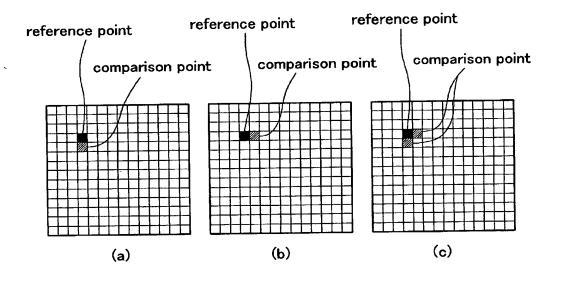


FIG.12

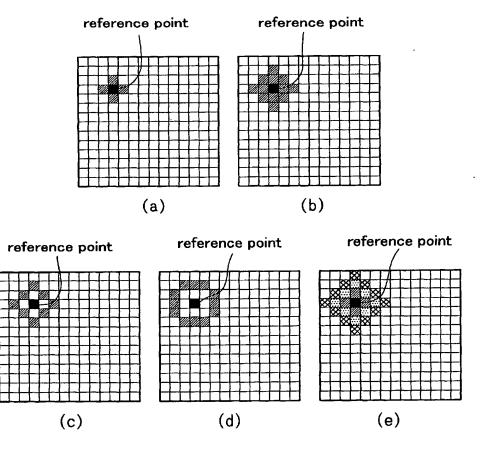


FIG.13

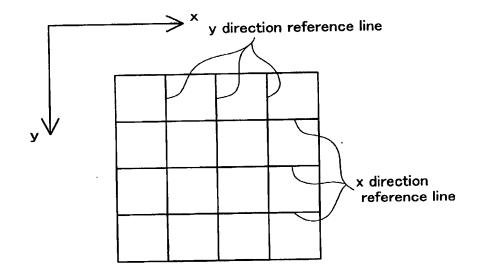
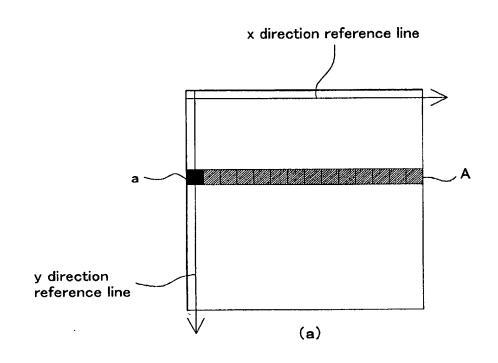


FIG.14



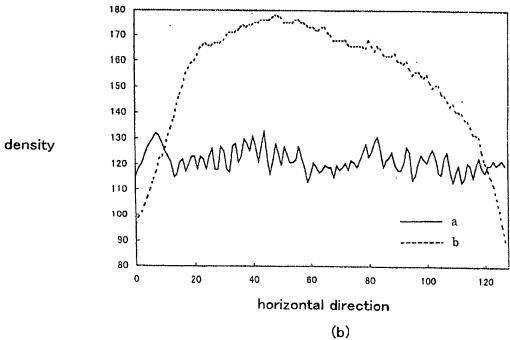


FIG.15

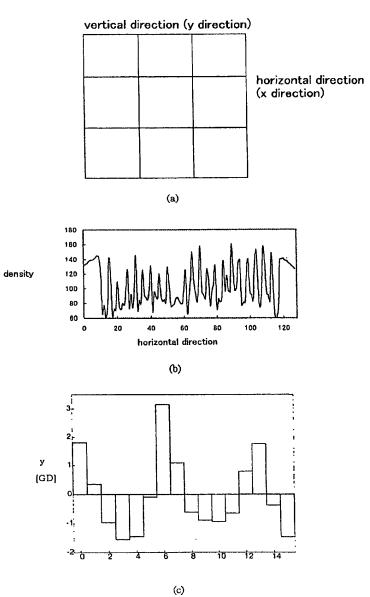
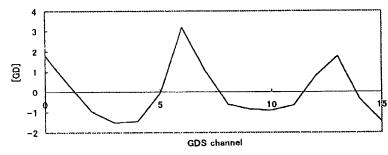
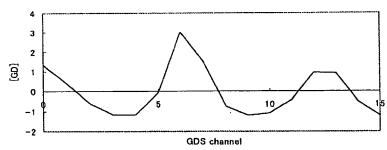


FIG.16



(a) GDS pattern of i-th line



(b) GDS pattern of i+1-th line

FIG.17

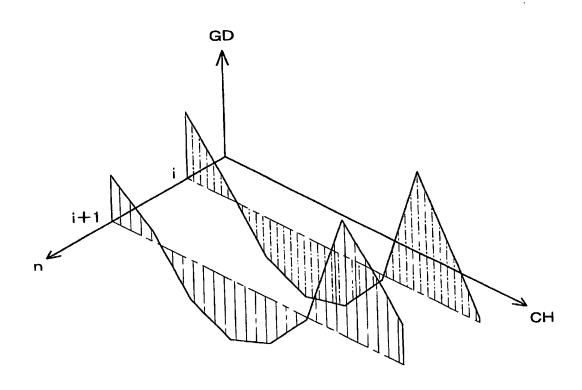


FIG.18

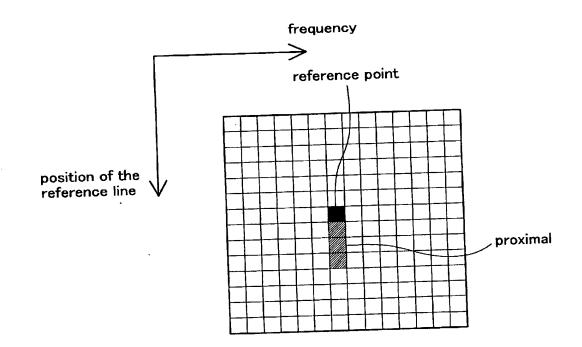


FIG.19

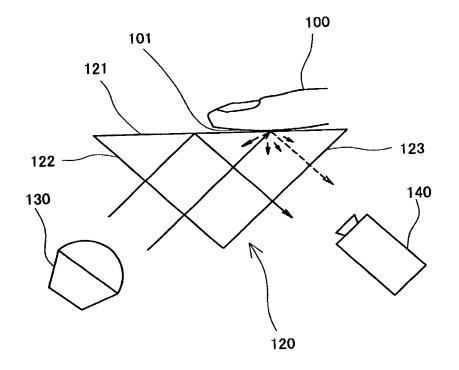
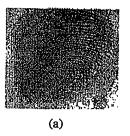
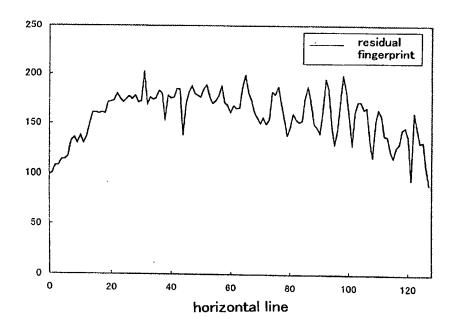


FIG. 20



density



(b)

FIG. 21

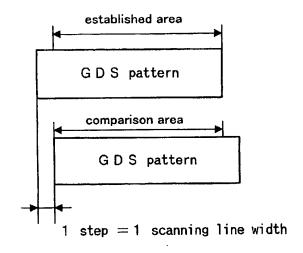


FIG.22

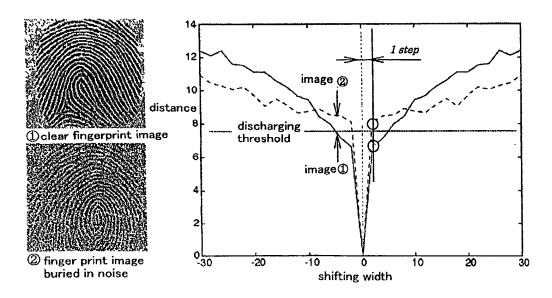


FIG. 23

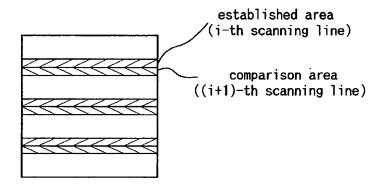


FIG. 24

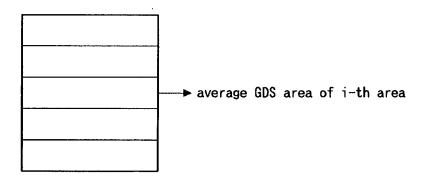


FIG. 25





(a) fingerprint GDS

(b) fingerprint pitch

FIG. 26

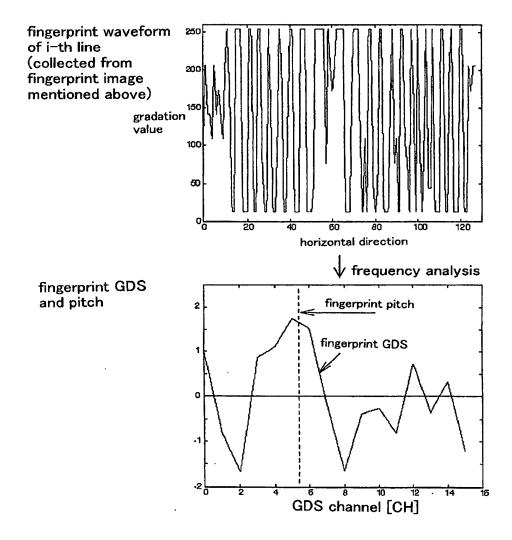


FIG. 27



